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Fire and Use and Occupancy Insurance

BY A. J. MYLREA
Reed, Shaw & McNaught, Ltd.

(Before Montreal Chapter, February 4, 1932)

A FIRE insurance policy is a dontract of idemnity, since by its one party (the insurance company) agrees to make good to another party (the assured) such loss or damage as the latter may have sustained in consequence of a fire under the conditions prescribed in the policy contract and to an account not exceeding that named in the policy.

The policy is not only a contract of indemnity but one of personal indemnity. It insures the party to whom the policy is issued. It insures no one else; hence it cannot be transferred without the consent of both parties to the contract.

In all contracts of personal indemnity, the indemnitor (the insurance company) shall make good in money or in kind, the loss sustained by the party to be identified (the assured) and thereby becomes entitled to the rights and advantages of the indemnified party in the same manner that such rights accrue to an endorser on a note who has, in consequence of his endorsement, been obliged to meet the note. It is for this reason that the insurer may require from the assured an assignment of all right of recovery against any other party for loss or damage to the extent of the payment therefor is made by the insurer otherwise known as subregation.

The right of subregation is contained in the so-called uniform statutory conditions applying in all provinces except that of Quebec, and is covered by Article 2584 of the Civil Code applying to fire insurance in the Province of Quebec.

Real Meaning of Insurance

A very common error is the statement so often heard that we insure a house or a barn, or a stock of merchandise, when, in reality, we do nothing of the sort. We insure the owner of the house or the barn or the stock of merchandise against the loss or damage that would come to him through the destruction of any of these articles.

The fire insurance policy covers direct loss or damage by fire, direct meaning immediate or proximate as distinguished from remote or consequential.

It is very important that the exact meaning of the word "fire" should be thoroughly understood. In a discourse on the subject, Mr. John R. Blades gives an excellent definition, namely, that the word "fire" as contemplated in the contracts insuring this hazard, is not a fire unless (1) it is accidental as to its origin and (2) is accompanied by ignition.

Fire is not accidental if it is intentionally started. If an assured builds a fire in his furnace or stove, he does so for a specific purpose, presumably economic and "friendly", and for that reason, any damage to the assured's property caused solely by such a fire, is not covered by the fire policy. However, if the fire escapes from its usual place of confinement and starts a second fire, the latter is stated to be "hostile" and accidental and hence is covered by the policy. Fires attributed to arson being wilfully kindled by the as-

sured, are in no sense accidental, although in one sense of the word they might be termed friendly. The difficulty is to prove arson.

The definition of fire requires that there must also be ignition. In other words, mere combustion cannot be stated to be fire unless such action is accompanied by the appearance of a flame or glow. The mere charring of wooden joists or floors adjacent to steam pipes or the spontaneous heating of a pile of hides in a tannery where there is no flame or glow would not constitute a fire.

Extent of Fire Coverage

You will recall I said a fire policy covers **direct** loss or damage. This is very important, for while the assured, in addition to recovering his loss on property actually destroyed by fire, can also collect any loss or damage to property by smoke from the fire or by water or chemicals or other materials applied as extinguishing agents, or for a hole cut in the roof or wall of his building to get at the seat of the fire, or from rain or snow entering the roof or windows of his structure after the fire, he cannot under the ordinary fire policy, collect any consequential loss.

For purposes of illustration, suppose that a dealer in fresh meats preserves his stock in a building equipped with electrical refrigeration, power being brought from a power house in distant section of the city. Suppose the power line supplying his premises passes a certain structure several blocks away. This structure burns; its walls fall across the power line and break it. If emergency lines cannot be run, there will be sufficient interruption to service to allow a rise in temperature in the cold storage room. If this happens, the meat may spoil, causing the dealer to sustain a loss. This loss cannot be included under the dealer's policy covering the meat, as the meat was not injured by direct action of fire.

The Quebec and other provincial insurance acts contain statutory fire conditions which are declared to be part of every fire insurance contract and are printed on all policies. When the parties desire to deviate from these definite provisions or conditions, such exceptions shall be noted in conspicuous type and using ink of a different colour. Any variation which does not conform with the statute shall not be legal and binding on the assured. No mention is made of the insurers however, who would therefore be bound by any clause attached to the policy indicated in any manner whatsoever. The insurance company can bind itself to an agreement which contradicts the statutory conditions if it so desires, the Law making no restrictions on the insured in this respect.

Statutory Conditions

We have dealt thus far, only with the standard printed policy and made passing reference to the statutory conditioins contained in every policy. Considerable time could be spent to advantage in a study of these conditions alone, as their provision are so important and may have a very material bearing on the adjustment in the event of loss.

It is from these conditions you learn that, should an assured incorrectly describe or misrepresent the property to be insured, the policy shall be of no force: — Any change material to the risk after the policy has been issued may void the policy .. The transfer of the interest under certain conditions may render the policy void .. Abandonment of the property is not allowed without consent of the insurance company — Money, books of account, securities for money,

and evidences of debt or title are not insured and that plate, plate glass, plated ware, jewelry, paintings, sculptures, curiosities, scientific and musical instruments, patterns, plans, uncoined gold or silver, works of art, articles of vertu, freacces, clocks, watches, trinkets and mirror are not insured unless mentioned in the policy. The insurance company is not liable for loss if there is prior insurances in force unless consent and/or notice is given — The policy does not cover loss by fire caused by invasion, insurrection, riot, civil commotion, military or usurped power, earthquake or volcanic eruption, nor for loss or damage to goods destroyed or damaged while undergoing any process in or by which the application of fire heat is necessary — nor for loss or damage occuring to buildings or to their contents, while buildings are undergoing alterations or repairs without special permission — nor for loss or damage occuring when coal oil, fuel oil, gasoline and similar compounds are kept or stored on the premises, without permission (oil for illuminating purposes excepted in restricted quantities) — Also that the insurance company will make good, loss caused by the explosion of natural or coal gas, in a building not forming part of a gas works. These conditions also deal with the steps to be taken by the assured in the event of loss.

The Rider or Wording

The printed policy, however, is not complete until a rider or "wording" so called, is attached to it. This wording is drawn up in such a manner that the insurance will properly fit the facts and conditions of the particular risk and the restrictive conditions of the statutory conditions modified to suit the individual needs of the assured.

The wordings, while written in various combinations, can be reduced to "specific" forms and "blanket" forms. Specific forms are subdivided into "single item" and "several items" while if there are a number of items on one form, irrespective of whether they be blanket or specific items the whole is known s a "schedule".

The "single item" specific form covers under one item a certain class of property, thus:

$1,000 — on Lumber.

The "several items" specific form covers two or more items of different kinds of property.

$2,000 — on Building
1,000 — on Equipment
1,500 — on Stock

The "blanket form" covers the different classes of property under one item:

$15,000 — on Buildings and Contents.

while the Schedule covers:

Item No.	Amount
1.	$5,000 — on Building No. 10 located at—
2.	2,000 — on Equipment therein.
3.	2,000 — on Stock "
4.	15,000 — on Building & Contents located at
5.	20,000 — on Buildings & Contents located at another place.
	$44,000

Manner in which Insurance is Written

Each of the above mentioned forms of insurance together with others, too numerous to mention here, has its proper place, but the

manner in which the insurance is written has a material bearing on the rate and the amount of insurance it is necessary to carry. For instance, in a factory your stock values may be constantly shifting from one building to another. To keep the correct amount of specific insurance on the stock in each building or section at all times would be quite a task, and to be sure you are fully protected your only recourse with specific insurance would be to place sufficient to cover the maximum value that would ever be at risk in each section. This might mean you would be carrying fifty percent more than your total value. The solution would be to cover the stock under a blanket item to cover in all buildings or sections. As soon as this is done however, a new condition arises and that is the insurance companies require that a "distribution" clause or "co-insurance" clause be inserted in the wording.

These clauses differ materially. Let us say you have a factory subdivided into four sections and have stock valued at $100,000, divided let us say, $50,000, $20,000, $20,000 and $10,000 and in the four sections called A, B, C and D respectively, and are carrying $50,000 insurance subject to "distribution". A fire occurs and does damage to the extent of $25,000 in section A, where the $50,000 value happened to be. The insurance is first distributed in accordance with the values obtaining at the time of the loss which would be -25,000 in A, $10,000 in B & C, and $5,000 in D. The loss only being $25,000, the insurance would be sufficient to reimburse you in full. However, had a $15,000 loss occurred in Section B. you would only collect $10,000, and must stand $5,000 loss yourself.

To collect the full amount of your loss in any one section, and where the loss in this section is total, and with a distribution clause in your policies you must carry 100% insurance as to your total value. This still may result in a very material saving when compared with specific insurance.

If the insurance had been written subject to 90% co-insurance clause you agree to carry insurance at least equal to 90% of the "actual cash value" or the property insured. In the event of deficiency you act the same as if you were an insurance company yourself for the difference between what you were carrying and 90% of the actual cash value.

To be specific, let us take the same distribution of values used in the foregoing illustration. Total value $100,000. You agree to carry at least $90,000 insurance. You do so, and a loss of $25,000 is sustained in Section A. The insurance companies pay you 90/90ths of $25,000 or $25,000.

Due to unfortunate conditions, the fire however, in another instance, spreads from section A to B and then to C and totally destroyed the stock in each. You have in all sections $100,000 value, $90,000 damage and $90,000 loss. You collect 90/90ths of your loss, or $90,000, the total amount of the policy and have $10,000 value still left. In other words you have been getting 10% more insurance than if written specifically and at a rate of 15% less per $100. insurance than if written without co-insurance.

Reversing the figuring the same protection with specific insurance would have cost you 30.7% more.

However, should you have been carrying only $50,000 insurance and sustained a $25,000 loss in Section A, the Companies would pay you 50/90ths of $25,000 or $13,888, and you would stand the difference of $11,111.12.

The same remarks apply to insurance on buildings or equipment.

Under-Insurance

One good feature about insuring buildings and contents under a blanket form, subject to co-insurance is that the buildings and equipment values act as a surge tank when it comes to the operation of the co-insurance clause if you are under insured due to a rapid increase in stock without an increase in insurance.

To illustrate: The buildings of your plant are worth $500,000. The equipment $300,000 and average stock $200,000, or a total value of $1,000,000. With a 90% insurance clause you agree to carry $900,000 insurance, which you do. Suppose a consignment of goods worth $100,000 additional is received at night which goes into your warehouse which already had $50,000 stock value therein, and your insurance is not increased. A fire loss occurs that night totally destroying the stock. Your value at the time of the fire was $1,100,000. You have only $900,000 insurance, your loss $150,000. You collect 90/99ths of $150,000 or $136,363.63, while if you had been carrying $180,000 blanket insurance on a $200,000 stock and the loss occurred as above, or when your stock values had increased to $300,000, you could collect 18/27ths of $150,000, or $100,000.

It has no effect whatever on the adjustment of losses if the Clause is lived up to by the assured. It is only when the assured does not maintain the agreed amount of insurance in proportion to the actual cash value that the clause is operative.

Co-insurance however is based on your agreeing to carry at all times insurance at least equal to a specified percentage of the "actual cash value." Care must be taken to determine what the actual cash value is. The value at the time of the fire is what counts, not what it was when the insurance was placed.

With "stocks" this factor is a comparatively simple matter because you know what replacement costs are. Suppose the stock was wheat and that you had purchased it a couple of years ago. Today it would be replaced for a fraction of what it cost. Inasmuch as you would be paid on the basis of its present day cost it would be asburd to carry insurance on what it originally cost you to buy. On the other hand, if you had purchased some raw materials or stock for sale before the new tariff or dumping duty was put in force and today that stock would cost you 25% more to replace, it is on the higher valuation you should base your insurance as it is on this valuation you would be paid in the event of loss.

Building and machinery values however are another subject. The actual cash value is a **reasonable** current cost to replace the property new, less the **actual** accrued depreciation.

Book Value and Insurable Value

Book values and insurable values are quite different. With a going concern in healthy condition the maximum depreciation is usually written off annually in order to reduce the profits tax as much as possible. Replacement are charged to maintenance instead of Capital expenditure for the same reason; the cost of dies and patterns are frequently expensed. With proper maintenance it is only a few years until the book value is materially lower than the insurable value. This so-called depreciation is actually amortization. Because of a sound policy to amortization carried on over a period of years, the book property valuation has been reduced to an abnormally low figure and a substantial renewal fund has been accumulated. The building that has not yet burned has certainly lost none of its actual value by reason of this fund or book value. On the contrary the fact that

such a renewal reserve is being maintained is the strongest proof that all that is possible is being done to provide against impairment of efficiency and impairment of investment.

The prime factors of depreciation are,

(1) Natural Decay
(2) Wear and Tear
(3) Obsolescence
(4) Inadequacy

Methods of Calculating Depreciation

There are a number of methods of determining depreciation, all of which are more or less approximate but the straight line method is probably as accurate as any and the most simple to understand and use. The "straight line formula" can be stated as follows:

Let V represent the investment, N the average life in period of years, S the salvage value and X the amount that is to be charged off for depreciation, and we have—

$$X = \frac{V - S}{N}$$

If the salvage value is zero, the formula becomes—

$$X = \frac{V}{N}$$

Therefore if you have a building that cost $10,000 with an estimated life of 25 years and salvage value zero, we have,

$$X = \frac{10{,}000}{25}$$ $400. annual depreciation to be charged.

Several companies we know work on the basis of deducting the regular depreciation until it has reached 25% of the original cost of the structure. From then on the insurable value remains stationery based on the assumption that the maintenance offsets any further depreciation.

The first cost of the building however has a material bearing. A plant built today instead of depreciating will in all probability appreciate in value for some years to come. One built ten years ago suffers a double depreciation, that of reduced replacement costs and that due to age.

The present day insurable values are largely matters of intelligent estimates. In arriving at the figures for yourselves a good gauge as to their accuracy is whether in the event of fire would you be satisfied to be paid on the basis of your figure. An appraisal by a regular appraisal company which will reflect accurately and in detail the insurable values is much to be desired.

The fact has already been stressed that a fire insurance policy only covers the direct loss or damage occasioned as a result of the fire, but it does not pay those standing charges which must be met whether the business is operating or not, nor does it provide for the net profit which would have been earned had a fire not caused cessation of the business.

Use and Occupancy

To insure the business against loss of earnings by reason of interruption by fire, use and occupancy insurance, sometimes termed business interruption indemnity, has been designed.

When the normal income of a business is reduced or ended by damage or destruction of the premises that produced it, the Use and Occupancy insurance will provide finances to keep the organization together, to meet obligations to stock holders, and others, and to finance emergency measures to continue business or to hasten the resumption of operations.

Assume for example, the complete destructions of a manufacturing plant which has been earning a substantial profit. There is an immediate ending of production, sales cannot be made, and income ceases. Until the plant has been rebuilt, or the manufacturer can arrange to purchase or lease a new one, there will be no income. Unless business can be commenced at once, in other quarters, the organization will commence to disintegrate, as the men are forced to find other employment to support themselves. Stock holders will complain of the loss of dividends, Bond Holders will expect payment of interest and tax officers will expect tax payments on assessments made prior to the fire, and on the income or profits of the tax period before it. There may also be demands unde/ contracts which cover definite periods, and which cannot be cancelled in case of fire. Skilled employees may hold yearly contracts, a lawyer may be retained on a yearly basis, advertising may have been contracted for in advance, and royalty payments may have to continue until a fixed future date.

In some cases power contracts are a continuing drain. Many other expenses however, can be ended promptly (common labour for example). Others must continue for a time. Salesmen away from the headquarters must travel home and employees must be retained to bring accounts up to date and look after collections.

Partial Damage

If however, instead of complete destruction there has only been a damage to the plant, it may be possible for the manufacturer to restore his premises in a comparatively short period of time, and suffer only for a temporary loss of production and diminished profits for the period. A resourceful manufacturer may endeavor to make up his production by renting temporary quarters or extra machines, or by running overtime with an extra force until his plant is put in order. Under such circumstances, his loss will be no greater than the extra expense incurred by the emergency measures.

A trivial damage to the plant may cost the manufacturer a day's payroll devoted to rearranging work, and a loss of production that will not be great enough to reduce sales.

In cases similar to any of the foregoing examples, the manufacturer would be indemnified by the use and occupancy insurance for the items of loss mentioned.

Classes of Use and Occupancy Coverage

There are many different kinds of use and occupancy forms designed to fit the needs of different risks but any of the standard forms will fit into one of the following classes.

1. For business enterprises that normally show constant earnings during the year—this form provides a uniform daily basis of payment.
2. For business enterprises showing fluctuating earnings this form provides for a fluctuating daily, weekly or monthly basis of payment.
3. For business enterprises of other kinds—these forms do not limit the policy to a daily, weekly, or monthly basis, but incorporates

a co-insurance or average clause and this provides for the payment of actual loss in full, whether uniform or fluctuating, providing that the required amount of insurance is carried.

This letter form of use and occupancy is known as co-insurance form and to date has not been adopted in Canada. The reason being that the introduction of the so-called English profits form of insurance is so much superior to any of these forms of Use and Occupancy that it has not been deemed necessary.

The forms in each class are ordinarily divided into manufacturing and non-manufacturing forms.

The manufacturing forms sometimes only include use and occupancy loss due to the damage or destruction of buildings and other equipment, while others, in addition to insuring buildings and other equipment include the loss to raw stock, or stock in process.

The non-manufacturing forms include loss to finished stock.

All standard use and occupancy forms limit the payment to the actual loss sustained and provide how the amount shall be detemined.

The Insured Income

The insured income is stated as being that part of the income which consists of net profit and fixed charges together with the part that may be used to pay expenses incurred for the purpose of reducing loss.

The period during which the assured may collect for the interruption to his income is stated as being the length of time required, with the exercise of due diligence and dispatch, to re-build, repair, or replace such part of the property as may be damaged or destroyed.

In order, therefore, to support a valid claim under a use and occupancy policy, the insured must be able to show that the property was producing income, and that, because of damage or destruction to the property itself, the income had been interrupted.

In passing let me just draw your attention to the fact that the period of indemnity is stated as being the length of time required, with the exercise of due diligence and dispatch, to **rebuild, repair or replace such part of the property as may be damaged or destroyed.**

The English profits form which we will refer to later, makes no such limitation.

How Calculated

The income insured is that part of gross income which represents:

1. Net profit, the net profit being the difference between gross profit and all expenses. It may be thought of as that part of the income left after all expenses have been paid, and all accruals have been provided for.

If the income has diminished, the first loss sustained is necessarily the item of profit.

2. Fixed charges must necessarily continue during the total or partial suspension of business, to the extent that such fixed charges and expenses would have been earned had no fire occurred.

Fixed charges are expenses which are not immediately terminated in case of fire. They vary in different business enterprises, but ordinarily consist of the following items:

Advertsing auditors' fees, agency contracts and expenses, branch or local office expenses, buying expenses, commission paid or payable on orders which the Assured are unable to fill on account of the fire, delivery service under contract, depreciation on buildings, machinery, equipment and motor vehicles, directors' fees, heating, interest on de-

bentures, bonds, mortgages, loans, overdrafts and borrowed capital, insurance premiums—life, insurance premiums—life and sundry, legal advice, light, printing, stationery and postage, power, pumping and ventilation, rents retainers, royalities, salaries and wages consisting of (a) officers, executives and employees under contract (b) foremen, skilled employees and others not under contract, but who would have to be kept on payroll to maintain the organization, subscriptions to trade and credit organizations, telephone and other service contracts, taxes (including federal, if not included in net profit), travelling expenses, upkeep of motor vehicles and/or horses, water, together with other miscellaneous charges or expenses not included in the foregoing list.

3. Expenses incurred for the purpose of reducing loss of income, such as overtime, labor, rental of extra machinery,, or quarters, express or truck shipments or material that would ordinarily be transported by freight.

Income That is Not Included

That part of income that goes towards the purchase of merchandise is not insured as no purchases will be made if the business is disabled by fire, and theoretically such loss in material that has been paid in advance or must be paid for on arrival, can either be held until the business has been re-establshed or can be sold.

The remainder of income ordinarily used to pay for the expenses of common labour is generally left uninsured because ordinarily the expenses of common labour can be terminated immediately after the fire and also because it would be necessary to carry insurance sufficient in amount to include the annual payroll as well as the other items of income already discussed.

Loss of income may be collected during the time required, with exercise of due diligence and dispatch, to rebuild repair or replace the property and **is not limited to the expiry date of the policy.**

The property to be rebuilt or repaired is generally buildings, equipment and machinery.

The property to be replaced in a manufacturing risk is usually raw stock, raw stock in process of manufacture.

The property to be replaced in a non-manufacturing risk is merchandise.

In rebuilding or repairing buildings, equipment or machinery, the period of loss continues to the date that the property becomes serviceable and business can be resumed.

On any manufacturing risks the destruction or damage to raw stock will produce **no greater loss to income** than the amount **that would have been produced by working up the raw stock,** and for this reason the period of the suspension due to the destruction of raw stock is limited to the time that the raw stock on hand would have made operations possible.

In the majority of cases, the raw stock can be replaced in much less time than allowed under this clause.

Replacing stock in process of manufacture that the same amount of stock shall be brought into the same stage of completion.

Usually the period allowed for this is limited by the form to thirty days.

Property Must Be Damaged

All use and occupancy forms specify that the property itself must be damaged or destroyed to impose liability for loss sustained. It therefore should be kept in mind that the loss caused by the inter-

ruption to power due to a fire in a nearby location, but not involving the insured property, is not covered.

This contingent use and occupancy loss however, can be covered upon amending the regular form to meet any specific requirements and upon the payment of an additional premium.

The manufacturer whose business has been interrupted by fire will ordinarily take immediate steps to resume operations, as by so doing, he will reduce his loss of income in proportion to the time saved in getting started.

The use and occupancy contract therefore requires the insured to resume operations promptly, this requirement being similar to the conditon in the standard fire policy, that the Assured protect his property from further damage.

It is also required of the insured that he use any surplus machinery or duplicate parts thereof, equipment or supplies, or reserve raw stock which may be owned by him so that the manufacturing operations can be resumed with the least possible delay.

When business conditions are good, and a plant is operating to full capacity, little or no difficulty is encountered in arriving at the amount of use and occupancy which should be carried, or in the amount to be paid in the event of loss.

With conditions as they are at present however, we are confronted with a more difficult situation.

Let us assume that last year the assured earned his standing charges together with a small net profit, the total of both being $30,000. His use and occupancy value per day with a non fluctuating 300 day form therefore, would have been $100 per day.

On the other hand, we find upon investigation that the standing charges and net profit which amounted to $30,000, was all earned in 200 days of intermittant operation throughout the year. This would mean that his actual use and occupancy value for his working days were $150.00. On what basis of daily use and occupancy value are you going to pay your insured for such a contingency?

Adjustments

In the last analysis the adjustment of a use and occupancy loss is a matter of good faith between the insured and the insurer, and seeing that the insured only operated his plant 200 days last year, he should have 100 days available to make up loss in production. This being the case, it is doubtful if he would suffer any material loss, or certainly not more than $100.00 a day if a fire should suspend his operations for some little time. The $100.00 daily indemnity or $30,000.00 policy is the one he should take and not the one for the larger sum.

If on the other hand you know that during the coming year you are going to operate full time, and instead of earning $30,000 you will earn $60,000, that is the insurance which should be placed. A saving clause is therefore necessary in all wordings which would make it perfectly possible for the assured to collect double the amount per day for a shut down that he was earning during the previous year.

The clause that I refer to as being necessary reads:

"Due consideration being given to the experience of the business before the fire and the probable experience thereafter."

Another feature which probably should be brought out more forcibly is the fact that the insurance does not cease with the expiry date of the policy. In other words, if you place a use and occupancy policy for a period of one year, let us say from January 1st to December 31st, and you have a fire on December 20th. The policy does

not cease paying on December 31st, but continues until you are capable of resuming operations no matter how long that may be, not exceeding of course, the number of days mentioned in the policy.

The English profits form of policy however, is fast replacing the ordinary use and occupancy contract.

The chief advantage of the English profits form being that::

(1) The daily amount payable in the event of loss is not specified as it is under the use and occupancy policy, and therefore takes care of fluctuating earnings adequately, the loss sustained being arrived at by ascertaining the reduction in turnover that the assured has suffered in consequence of the loss with a similar period of the previous year.

(2) While the use and occupancy only covers until such time as the Assured, with due diligence and dispatch, can rebuild, repair, or replace his buildings or equipment or raw stock, the English Profits policy does not so limit the period of indemnity.

You can readily perceive a condition where the assured has a contract to supply a concern with a given quantity of its product daily or weekly, and due to damage to a machine, the assured is not in a position to supply his customer with the required product. The customer may promptly take advantage of present day conditions, cancel his contract due to non-delivery, which non-delivery may have only been for say, two weeks, which was the time required to place the machinery back in operating condition. The assured at the end of two weeks is in a position to resume operations, but his contract is cancelled, and therefore there is no object in him doing so.

Under the use and occupancy policy he can only collect for two weeks loss.

With the English profits policy, under such conditions the assured could collect for his loss in consequence of reduction in turnover until such time as he was able to get his turnover back to normal, even though he could resume operations in the two weeks time but his turnover did not get back to normal for 8 or 10 months.

This advantage is too apparent and too great to be overlooked with the result that it would not be surprising to me, within a comparatively short period of time, to see the use and occupancy policies a thing of the past.

To those of you who would like to make a more detailed study of the subject matter of this brief address, I would refer you to "Adjustment of Fire Losses" by Prentiss B. Reed, a book I have quoted from frequently and at length, published by the McGraw-Hill Book Co. Inc.; "Removing the Mystery from the Use and Occupancy Insurance," by W. T. Foster, published by the National Underwriter Co.; "Profits Insurance," by Henderson & Mathews, published by William Blackwood and Sons, London, and "Insurance of Profits," by A. G. Macken, published by Sir Isaac Pitman and Sons, Limited.

Control of Sales and Distribution Expense

BY DAVID M. FARISH. C. A..
General Service Manager, Northern Electric Company, Ltd., Montreal

(Before Toronto Chapter, January 18, 1932)

THE subject on which I have been asked to address you is one of utmost importance at all times, but more particularly so at the present time when practically every company is being seriously affected by the low volume of business available under present conditions.

CONTROL OF SALES AND DISTRIBUTION EXPENSE

The subject covers so many classes of expense that it would be impossible in the time at my disposal to cover each one satisfactorily. therefore I have decided to speak upon five elements of cost which I believe will more particularly interest you.

Control of Advertising Expense:

At least two months before the commencement of each fiscal year the proposed advertising programme should be prepared by the advertising manager in conjunction with the respective sales managers, and should then be submitted to the company's executives for approval. The statement should show the amount to be spent on each sales group and each class of advertising. After final approval, the statement should be embodied in the company's expense budget by the accounting department.

The next step is to control at least monthly by accounting records the advertising expenditures. The advertising manager should prepare immediately preceding the commencement of each month, an appropriation covering the expenditure anticipated for each class of advertising for each sales group and, after obtaining necessary approvals, forward same to the accounting department as their authority against which to pass adbertising purchase orders. As each order is received the accounting department posts same against the corresponding appropriation and if the amount is exceeded the order is turned back to the advertising manager and cannot be passed by the accounting department until same is specially approved by the sales executive officer. At the end of each month the balance on each appropriation is automatically cancelled. As estimated costs frequently have to be used in posting the orders, when the actual invoice is received any necessary corrections must be made on the appropriation and the item marked off as passed for payment.

At the end of each month when the books are being closed, any orders for which invoices have not been received are placed on the books by journal entry at estimated costs so that they will be included in the expenses. The journal entry is reversed on the first of the next month. The advertising-by-lines covering the expenditures for the month is then prepared, and also a similar statement for period to date, This statement shows the expenditures by class of advertising and also by each sales group. Exhibit "A" is an example of the statement covering a six month period. The statement for each month is exactly the same except that it only covers the month's expenditures.

In addition, an advertising appropriation statement (exhibit "B") is prepared at the end of each month showing the amount authorized, the actual expenditures for the month for which invoices have been received, the amount of open orders or requisitions for invoices have not been received, the combination of these items and the balance representing the amount over or under-spent for each class of advertising. A somewhat similar statement (exhibit "C") is prepared each month for the period to date, except that this statement shows the gross budget for the year and the amount unexpended instead of the monthly appropriation and monthly unexpended balance.

These advertising statements are of great value to the sales executive as he can see the trend of expenditures for each month and also the trend of expenditures to date as compared to the amount available for the year by each class of advertising.

Exhibit "A", advertising expense by lines report, shows the sales executive the advertising expense incurred by classes of sales

and can be studied in conjunction with the actual sales results to see whether or not the expense incurred is giving the results anticipated. This comparison to my mind is most important as some merchandise appears to demand intense advertising in order to obtain the necessary volume of sales, consequently there is a danger of overlooking the object of business which is to show a net profit on each sales group.

If for any reason during the year it is decided to increase or decrease the advertising budget, the accounting department automatically use the new budget figures in future statements.

Compensation Plan for Remuneration of Salesmen

Owing to the pecularities of many businesses there are many different remuneration plans in use for salesmen, and more particularly to outside or field salesmen. The plan which I propose to present to you is one which is in use in both the United States and Canada and is, I believe, reasonably sound and fair to the salesmen.

Each outside salesman is assigned a number in each branch or district, and a number is also assigned for office sales. An extra copy of each invoice is made for use in compiling the necessary information for the operation of the plan. On this copy the number of the salesman to receive credit for the sales is shown: If no salesman is entitled to credit the office number is shown. Each item on the copy of a value of $25.00 and over is costed from cost cards and, in addition, the sales group classification is shown against each item. These copies must balance with the total sales for the month and an extra copy of the invoice recap is made for this purpose. The sales by group classification are tabulated. also the cost of the items costed and their corresponding sales and also by salesman's numbers. The amount of the uncosted sales in each sales group for each salesman is given the same gross profit rate as the costed sales realize. I would like to point out that the elimination of the costing items under $25.00 eliminates an enormous amount of detail work.

The amount of sales for each group, the gross profit earned and the average profit rate for all sales for each salesman is then posted to accumulative monthly report (exhibit "D").

We will now presume the salesman is to receive a credit of 2% of the sales based on a 22% gross profit rate, the 2% credit to be increased or decreased to any difference between his actual gross profit rate and the 22% rate. The 2% credit based on his actual sales is calculated and shown in the statement. The credit to be received based on its relation of his actual gross profit rate to 22% is then calculated and shown on the statement. In addition, however, in order to encourage the sales of certain lines we will presume it is decided to allow the salesmen an additional credit of 2% on the group #1 and 1% on group #2 sales. These amounts are calculated and shown as special compensation. The amount of credit based on the actual gross profit rate and the special compensation is totalled and shown in the total column of the salesmen's credit.

In addition, however, it is necessary that each salesman be given a weekly or monthly salary which shall repesent the minimum amount he shall receive, but the amount so paid shall be applied against his compensation credit. This amount is shown in the salary column of the statement. In addition, there is shown on the statement the amount he has expended for trafelling and entertainment, which is of considerable value when studying these statements.

At the end of each year the salesman is entitled to the difference between the total amount of his credit and the salary paid. Gen-

erally, however, to protect a campany against unusual conditions which might materially affect the earnings of a salesman, it is the custom in connection with this plan to use a basis of scale down on the credit of the salesman when his net earnings exceed 33-1/3% or 50% of his salary.

The plan outlined has many good points and encourages the salesman to—

1. Increase his sales overall.
2. Increase sales in certain desired lines.
3. To maintain his gross profit rate.

The plan, however, like most salesmen's remuneration plans, has some weak points. For instance, there is no incentive to assist in keeping down his travelling expenses or to in any way be concerned about unreasonable demands affecting distribution expenses. Nor is the salesman affected in any way by sales which probe uncollectible. These two weaknesses can, however, be taken care of by close supervision by the sales executive officer and the credit manager.

The plan assists to a large extent in controlling a salesman's earnings according to the result of his efforts, and with a general knowledge of conditions surrounding each salesman's territory enables a sales executive to estimate the ability of the salesman. The rates used in connection with this plan depend to a large extent on the nature and earning power of the business concerned.

Distribution Salaries

Under this classification is included the salaries of employees responsible for an order from the time it is received until the merchandise is shipped and the invoice issued to the customer. The merchandising and clerical functions in connection with an order are frequently caled non-productive and are consequently not given the attention they should receive. In my opinion, anyone who has anything to do with work which means service of any kind to a customer represents a productive expense, as the efficiency or inefficiency of such employees may have a material effect on your relations with your customers, and employees should have this very important point before them all the time.

Once satisfied that your employees have been properly trained and that their efforts are giving satisfaction to your customers, the next point is to see whether or not you can use a measure of expense by which you can control your distibution salaries. As this expense covers in general, warehousing and clerical work, the number of bills issued must to a large extent represent a measure of expense, particularly if you have several branches for comparison of expense.

I would therefore suggest that you figure out what you consider your distribution salaries per bill should be, and the number of bills you believe should be handled per employee for a monthly period, and then compare same with the actual results and if you have not kept statistics of this kind I think you will find that it is actually costing you a lot more than your estimate.

I have had statistics of this kind kept for several years, but decided a year or two ago to go further by breaking up these salaries into several groups, somewhat along the following lines:-

1. Superbision.
2. Stock Records and Maintenance.
3. Service Correspondents.
4. Order entering and billing.
5. Office Service (Stenographic and typing work, filing and mail service.)

EXHIBIT "A"

ADVERTISING EXPENSES BY LINES—SIX MONTHS ENDING JUNE 7, 193—

Class 1:	Total	Institutional	Trade Paper	Dealers Helps & Direct Mail	Window Displays	Miscellaneous
1-A Class	1,985	335	600	1,000		50
1-B Class	1,005	v30	100	500		75
1-C Class	785	335	200	250		
1-D Class	375		100	250		25
Total	4,500	1,000	1,000	2,000		150
Class 2:						
2-A Class	3,435	335	500	2,500		100
2-B Class	1,735	335	300	1,000		50
2-C Class	1,080	335	200	500		50
Total	6,250	1,000	1,000	4,000		250
Class 3:						
3-A Class	7,555	330	2,000	4,500	700	25
3-B Class	4,410	335	500	3,000	500	75
3-C Class	4,235	335	500	3,000	400	
3-D Class	2,400			2,000	375	25
Total:	18,600	1,000	3,000	12,500	1,975	125
Grand Total:	29,000	3,000	5,000	18,500	1,975	525
Budget for Year:	57,500	7,000	15,000	30,000	4,000	1,500

EXHIBIT "B"

ADVERTISING APPROPRIATIONS JUNE, 193—

Classifications	(A) Amount Authorized	(B) Actua Jun Expenditures	(C) Open Requisitions	(D) Total (B+C)	(E) Balance Unerpended
Institutional	500	200		200	300
Trade Paper	1,000	1,100		1,100	100
Dealers Helps & Direct Mail	2,000	1,900	300	2,200	200
Window Displays	300	100	150	250	59
Miscellaneous	100	50	25	75	25
	3,900	3,350			

ADVERTISING APPROPRIATIONS COMPARED WITH BUDGET—SIX MONTHS ENDING JUNE, 193—

	(A) Gross Budget 193-	(B) Expenditures Six Months to June 193-	(C) Open Requisitions	Total to Date (B+C)	Budget Unexpended
Institutional	7,000	3,000		3,000	4,000

Miscellaneous	100	50	25	75	25

ADVERTISING APPROPRIATIONS COMPARED WITH BUDGET—SIX MONTHS ENDING JUNE, 193-

	(A) Gross Budget 193-	(B) Expenditures Six Months to June 193-	(C) Open Requisitions	Total to Date (B+C)	Budget Unexpended
Institutional	7,000	3,000		3,000	4,000
Trade Paper	15,000	5,000		5,000	10,000
Dealers Helps & Direct Mail	30,000	18,000	500	18,500	11,500
Window Displays	4,000	1,800	175	1,975	2,025
Miscellaneous	1,500	500	25	525	975
Total:	57,500	28,300	700	29,000	28,500

EXHIBIT "D"

WESTERN DIVISION

SALESMEN'S COMPENSATION BASED ON SALES—GROSS PROFITS AND EXPENSES

(Six months ending June 30, 193-)

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
	Sales				Gross Profits		Salesmen's Credit				Expenses		
							Based on 22% G.P.	Based on Actual G.P. Rate	Special Compensation				
Salesmen's Name	Class 1	Class 2	Class 3	Total	% of Sales	Amount	Rate (e x 2%)	(f x h ÷22)	Class 1 & 2	Total (i + j)	Salary	Trav. & Entertainment	Total
J. Jones	10,000	15,000	60,000	85,000	13.0	11,050	17.00	1,005	350	1,355	1,200	400	1,600
J. Smith	6,000	9,000	20,000	35,000	30.0	10,500	700	955	210	1,165	900	500	14,00
J. Brown	4,000	7,000	80,000	91,000	12.5	11,375	1,820	1,034	150	1,184	1,320	300	1,620
Office	25,000	40,000	125,000	190,000	15.0	28,500	3,800	2,591	900	3,491	3,000	300	3,300
Total	45,000	71,000	285,000	401,000	15.3	61,425	8,020	5,585	1,610	7,195	6,420	1,500	7,920

EXHIBIT "E"

WESTERN DIVISION—MERCHANDISE INVESTMENT AND TURNOVER

Six Months ending June 30, 193-				
Merchandise Investment at June 30	7,000	20,000	100,000	127,000	1.
Average Merchandise Investment six months	8,000	22,000	105,000	135,000	2.
Cost of Warehouse Sales	27,000	57,000	256,000	340,000	3.
Average Days Warehouse Sales at Cost (divided by 180)	150	317	1,422	1,889	4.
Number of Days Stock	47	63	70	67	5.
Average Number of Days Stock for period	53	69	74	71	6.
Turnover Rate	6.8	5.2	4.9	5.0	7.
Turnover Rate same peroid previous year	6.3	5.4	5.0	4.9	8.

6. Accounting (Bookkeeping, Accounts Payable, Customs and Transportation.)
7. Warehousing.

Before putting the system into effect I had a study made in order to establish a standard cost for each of these groups of expense and then compared same with the actual cost and found the proposed standards quite a little lower than actual costs, and as a result had a complete survey made of every operation being performed at each branch and it was astounding the number of operations we were able to prove were unnecessary and were consequently discontinued. As an illustration, the investigation showed tht one copy of our order set-up was unnecessary on a particular class of order, this eliminated the use of 50,000 forms per year on each of which it was estimated ten minutes were spent by various employees. The filing alone of these forms you can readily understand was quite a lot of work and expense. My experience shows that generally speaking too many copies of order set-ups and other documents are made up, and also in some cases forms which are necessary are filed after completion when they could be destroyed.

In less than a year practically all of the branches have been able to meet the standards set for the operations referred to above.

With reference to warehouse salaries which cover all the physical handling of the merchandise, the salary cost and number of bills per employee should be based on stock shipment bills only per month: Another measure of control is to obtain the ratio of warehouse salaries to warehouse sales and compare same with the same ratio for other branches.

As there may be unusual transactions during any month, the statistics should cover the period to date and the same period of the previous year.

The aforementioned statistics will give the executive responsible for the control of distribution salaries a picture of the overall condition, and the variations which show up from time to time on investigation will frequently bring to light some unnecessary expense, particularly when the results of all branches are compared.

The cost per bill may be used with good effect in connection with the other classes of distribution edpense, but time loes not permit going into the control of other expense.

Control of Merchandise Investment

Competition in business has forcel companies to give considerable thought to the amount of money invested in merchandise and how often the investment turns over each year, so I feel that a few minutes should be devoted to this important subject.

I believe a card should be kept for every merchandise item carried in stock, preferably in a cabinet such as the Kardex. The card should bear the name of the supplier and a description of the item with its code number if any. Each purchase order for replenishment should be posted to the card in the space provided and the date the merchandise is received should be noted; this is of use in gauging the time required for replenishment. A running balance of quantity on hand should be kept, receipts being posted from receiving entry and sales disbursed from the shipping ticket prior to shipment. Maximum and minimum quantities to be carried should be shown at the top of the card and should be changed from time to time, particularly when the item is a seasonable one.

The work of the stock maintenance men is most important and to a large extent on their efficiency depends the success of the stores

department. It is their duty to disburse from the cards and to order for replenishment. They should therefore have a thorough knowledge of the merchandise, the seasonable demands and the time required to get replenishments. Service to the customer is lepenlent on their efficiency, but so also is the number of merchandise turnovers, consequently the must analyze the movement of each item and order for replenishment so that stock wili be received before the present stock has been used up. They must watch for items which are becoming slow movers and find out why, so that if necessary they may be marked "Do not replenish," and impress upon the sales manager the necessity of disposing of such items so as to prevent unnecessary sacrificing at a later date.

The stores supervisor should inform the stock maintenance men the number of turnovers established as the standard for each merchandise class as it will probably be found that there is a variance between classes.

Merchandise turnover is the key to successful merchandising. The turnover measures the rapidity with which stocks are sold out and replenished. The more rapid the turnober, the larger is the return on the investment used, or in other words, the smaller the amount of capital required to do a given volume of business.

If, for example, an average merchandise investment of $100,000 is 'expected, with six turnovers per year, and this investment is allowed to increase to $150,000 with no increase in sales, your turn over drops to four per year and you have incurred for interest alone at 6% an extra charge of $3,000 per annum. apart from extra space used, insurance, etc., and also an increased hazard for absolescence or slow items which entail considerable loss.

Exhibit "E", merchandise investment and turnover report, shows briefly the results of a branch or district which is of considerable value to an executive, as it shows the following information for not only the total merchandise investment but also for the three classes of merchandise:—

Merchandise investment at end of six months.
Average merchandise investment for six months period.
Cost of warehouse sales for six months.
Average days warehouse sales at cost for six months.
Number of days stock on hand at end of period.
Average number of days stock for six months period.
Turnover rate for six months period.
Turnover rate for same period previous year.

A study of this report and a comparison with the results obtained by other branches will bring to light unhealthy conditions if they exist, and is of considerable assistance in controlling the merchandise investment.

Control of Accounts Receivable Investment

Some of you may feel that this subject should not be considered as a sales and distribution expense, but I believe it should be considered under this heading because a sale is not complete or profitable until the money is collected from the customer, and the manner in which the credit manager handles the collection may have a material effect on the future relations with the customer.

The subject is also an important one because sometimes there is a tendency with the sales department to give a customer the impression that the company's regular terms of sale will not be enforced and this frequently causes trouble between the credit manager and

the customers may react on the sales department through loss of future business. Also a credit manager, knowing a customer is financially sound, may assist the sales department by suggesting that they endeavor to obtain more business from the particular customer.

If you sell a customer on 30 day terms, for instance, and your sales prices are made up on that basis and your customer takes three or four months to pay, your profit is reduced by 1% or 2% and too much credit of this kind will materially affect the company's results.

Too lax a policy with regard to cash discount by the credit department may also materially affect the net results and some customers will at times attempt to take cash discount after the term date; this action should be discouraged as it is not fair to the customers who live up to the terms of sale.

A company should not be expected by its customers to undertake the business of a bann and, therefore, the credit department should follow promptly for payment of those accounts which are not paid according to terms of sale. As a matter of fact, a customer should appreciate such action as it gives him a good excuse for the forciny of the collection of his own accounts receivable which will materially assist him in obtaining a better return on his investment.

Each branch or district should prepare at the end of each month after the accounts receivable ledgers are closed, a collection report which should cover all accounts with balances outstanding over a certain amount, say $200.00. The statement should have columns headed "30 days, 60 days, 90 days and prior", and the balance thereon should be analysed accordingly. All columns should be totalled and the percentage of the total of each column to the grand total shown. For balancing purposes the total of accounts under the $200 may be shown in one amount in the balance column. The credit manager should show on the summary sheet of this report on estimate of the collections for the next month divided into ten day periods, as this information is of considerable value to the executive officer responsible for collections in estimating the total collections of the company for the month.

The collection reportsi should be used by the executive officer for supervision purposes, seeing that no accounts are being permitted to exceed reasonable credit limits. It is advisable to allow the credit managers as free hand as possible on accounts on which credit risk is considered satisfactory and only on accounts on which the risk is questionable should the confirmation of the executive officer should as far as possible act in an advisory capacity.

The credit managers should be informed of the receivable investment turnover which the company expects and should realize that the results of his collections in meeting or improving such standard, assists in improving the company's net results.

EXHIBIT "F"

NUMBER OF DAYS RECEIVABLE JUNE, 193

	Total			Group A (1)			Group B (2)		
	June 193	May 193	Dec. 193	June 193	May 193	Dec. 193	June 193	May 193	Dec. 193
Maritime Division ...	50	50	48	46	47	45	54	54	47
Central Division ...	45	46	43	41	42	40	48	50	45
Western Division	58	60	55	50	53	45	65	67	63
Total	49	51	47	43	46	42	53	55	51

(1) Group "A" covers all Wholesale Customers.

(2) Group "B" covers all Contractors and "Other" Customers not in Group "A".

Exhibit "F", number of days receivable report, is of considerable value to an executive officer in comparing the results of one district with another, and also in comparing current results with previous results. This exhibit shows two groups of customers—(1) wholesale customers, (2) Other customers. The groups may be used in any manner most suitable to the nature of the company's business and the statement is only divided in this manner for illustration purposes.

General

One phase of business at the present time which I believe is causing concern to most companies owing to its effect on expenses, is the number of orders of small value being received and naturally it is difficult to inform your customers that such business is not profitable. Each company, however, can assist in overcoming this trouble to some extent by analyzing its method of ordering. We have been studying our order system for over a year now as far as possible are grouping orders on the same supplier and generally trying to eliminate our small orders. I recommend this thought for your consideration.

In closing I would add that in addition to the expense and investment controls which I have outlined, prior to the commencement of each year an annual budget should be prepared covering sales, gross profits, expenses, investments and net results. The budget figures for each class of expense or investment shohld be compared monthly with actual results as a further aid in the control of ex-expense and investment.

The Laundry Industry To-day

BY H. E. HOLYOAK,
Modern Laundry & Dye Works Co. Ltd., Winnipeg

(Before Winnipeg Chapter, Feb. 16, 1932)

SCIENCE, which has played so great a part in every field of human endeavor, has not passed by the laundry industry. Owing to the crude methods used in the early days of the commercial laundry the laundryman was looked upon very unfavorably and was considered a necessary evil which had to be endured amongst other evils of those heroic days. Picture to yourselves, gentlemen, the first steam locomotive—what a crude monstrosity it was compared to the graceful and powerful engines of to-day.

Most of us can remember the horrible, jerky, evil smelling automobile of thirty odd years ago. Compare it with the beautiful cars of to-day, and so on in regard of every contrivance that man's ingenuity has invented.

So the laundry of the past, the crude machinery, the clumsy and drastic methods used to wash clothes has completely disappeared, and, we are glad to say, the prejudice against the power laundry which, in those days, was partly justified, has practically disappeared also.

The wonderful modern machinery, designed to be kind and gentle with the goods yet thoroughly efficient in the operation called for; the wise application of the findings of our Institute Research Bureau, the development of formulas for the cleansing of various fabrics,

all have contributed towards raising our industry from a very lowly place to a prominent position amongst the foremost industries of this Continent.

The annual turnover of the laundries of the United States and Canada is approximately $700,000,000. It may be of more interest to give you a few figures as applied locally.

The investment in power laundries in Winnipeg is nearly one and a quarter million dollars. The wages paid amounting to (per year) approximately $502,000.00. Supplies $230,000.00. Light, gas and fuel $52,000.00. Insurance $15,000.00. Taxes $14,000.00. Advertising $15,000.00. Eighty million gallons of water is used every year in this service of cleansing the soiled garments of Winnipeg's citizens and steady employment is given to 1,200 men, women and girls.

History of the Industry

The history of the commercial laundry on this continent is most interesting. The R.H.H. Steel Laundry in Jersey City is as old as the industry itself.

In the year 1831 a sea captain was visiting at the Steel farm situated at what is now Seventieth Street in New York City. He suggested to Mrs. Steel, the wife of his host, that she could make some extra "pin money". The idea being to establish a laundry catering to sea fearing men and ships. This captain complained that he never had enough clean linen, it being impossible then for men on ship board to have their linen laundered and returned while in port.

This friendly captain assured Mrs. Steel that if she could open a small laundry that would cater to this need, he would not only send her his personal laundry, but also the work sent out by his company, the Cunard Line.

The Steels followed this man's advice and the laundry started in this humble way in 1832 has grown until to-day it has become the largest flatwork laundry of its kind in history, the capacity of this immense establishment, which now stands on Jefferson Avenue, Jersey City, being over half a million pieces daily. Sometimes a big ship will arrive late in port and this laundry is called upon to launder and deliver the staggering amount of 750,000 pieces in a single day!

A Research Plant

We have an Institute at Joliet, Ill., that any industry might well be proud of, known as the million dollar proving ground of the laundry industry. Which, with its various departments manned by skilled chemists and engineers and textile experts, is functioning in a high degree to still further attain a yet higher standard of efficiency in the laundering and cleansing fabrics. You will readily see that with the introduction of synthetic fabrics such as rayon, celanese etc., which are derived from various sources, the correct laundering of same, so as to preserve their strength and lustre, becomes a much more intricate affair than the handling of natural yarns such as cotton, linen or wool. Some of these new fabrics will actually melt and disappear if subjected to the same temperature which the correct finishing of linen and cotton calls for.

This institute has also served admirably in the development of formulas for the removal of the 101 odd strains, any one of which the launderer may be faced with the problem of removing. To determine the nature of the stain and to successfully remove it without injury to the fabric often calls for knowledge and skill of a higher order.

Then there are the many services offered by the laundries of today which a few years ago were not thought of, such as damp-wash, semi-finished, rough-dry, family flatwork and others. All with a view to meeting the diversified needs of the pockets of the general public. This calls for a more elaborate system in bookkeeping and the different departments employed tends to increase the cost of production. The successful running of a commercial laundry in these days of exacting demands and super service is a much bigger job than it was in the days of slower motion and simpler needs.

Having made these few general remarks and assured of your further kind interest and attention I would like to take you in throught on a trip through a modern laundry plant.

Plant Operations

We will, for the sake of brevity deal with the average bundle a man would bring into the laundry for the one day service. The drivers bring in loads of work from their routes but we will just deal with the average call customer's bundle.

At 9.00 a.m. these bundles, having been registered as received, are taken to the marking room, where contents are listed and marked, also classified according to the group to which they belong. The proper classification of goods is one of the most important things in laundry. As many as ten, and sometimes more different divisions having to be made, so that each piece is processed correctly according to the formula which has been developed for that particular class of fabrics. Now the goods are ready for the Washroom, the time being around 10.30 and we want to have them washed by the time the lunch bell rings at 12 o'clock. Down in the washroom work is in full swing, except for some machines which have been held in readiness for the one day special.

Let us examine one of these huge cascade washers for a moment. Look inside and see how beautiful and smooth it is all over. Pass your fingers over the surface. Note the entire absence of any suggestion of roughness, all perfectly smooth as can be. Notice the four or five big ribs which carry the clothes to a point until they fall back into the water with every revolution. Now the washman has loaded his machine and let in the first bath and set the wheel in motion. Five even turns each way preventing the clothes from balling up and allowing them to fall back into the water which ensures thorough penetration and cleansing. Eight times the water is changed. Three baths being suds, beautiful light foamy suds, and five rinses, the last thing being absolutely clear, likewise the goods which are now taken out, for the last speck of dirt has disappeared entirely.

Extracting the Water

Carefully the operator lifts out all the goods and how fresh and clean they are now! They are then placed in the basket of the extractor, the load is carefully balanced for a smooth, even run, the cover shut down and the machine put in gear. Now watch how it starts to spin, the water already finding its way out through the perforated basket and carried away through the outlet at the base. Fast, faster it goes until a merry spin of 1000 revolutions per minute is attained, the water pouring out below, while the goods lie snuggly in the basket with no wear or tear in the operation.

After a few minutes the water is extracted, the goods are now ready for the skilful hands of the finishers. In the meantime silk and woollen goods have been washed in machines specially adapted

for their more delicate fabrics. These machines are geared to run slower and are very deep to allow of heavier suds being raised which is essential for the successful laundering of woollens and silks. Look at these blankets just washed, see how soft and fluffy they are and how sweet and wholesome they smell!

Then the very delicate pieces have been washed by hand in the most gentle manner possible. Thousands of gallons of pure soft water have been flowing through all these goods and now they are ready to go up to the various finishing departments.

It is sometimes amusing to hear of the impressions people have of a laundry and its operation.

A little while ago we were told by a customer quite seriously that she always liked to send her clothes in on Monday because she knew that the water must be getting pretty dirty by the end of the week!

Now let us follow the one day special work up to the finishing room, where ready hands place shirts and collars into neat piles ready for the first operation. By this time the bell rings for the lunch hour 12 noon.

Finishing Operations

The first item we will consider as the one o'clock bell rings is the starched collar which, by the way, passes through no less than nine operations in the finishing process.

It is first passed through the starcher, a machine consisting of several rubber rollers running in a bath of starch, then it is carefully rubbed off to make the starching even, and hung on a conveyor passing through the drying chamber. This conveyor takes twenty five minutes to travel through the drying room. Then the collars are passed through a dampening machine after which they are put in a press which leaves just sufficient moisture in them to make a perfect finish in the ironer, through which they are now passed. The collar ironer is a machine which has a very large roller, geared to travel very, very slowly. Next comes the edger, a small but very efficient machine which smooths the edges of the collar. But for this machine, many a man would cut his throat unwittingly and curse the laundryman. Now the collar has to be turned to its final shape. To facilitate this a damp seam is made in the centre by running it through a small machine for the purpose. Now it can be easily doubled over for its final shaping in the last machine which turns the collar out absolutely perfect as far as the laundering is concerned. Now the many thousands of collars are taken to the assembling room where they are carefully sorted out and placed in the division bearing the mark which corresponds to the mark on the collars.

Now let us go back and see what the girls have been doing with your shirt. The dress shirts have been starched on the starching table and now take their place in time with the negligee shirts, the starching of which has already been done in the washroom in the last process.

Look down the row of machines devoted exclusively to the finishing of shirts, noticing how each is padded where it comes into contact with the shirt. See the girls in a row, each standing before a machine the first finishing the cuffs, the second the neckband, the third the yoke, the fourth the bosom, the next the sleeves and finally the body of the shirt. Quickly and efficiently the skilled hands perform each operation passing the shirt along the line. At the end of the row a girl is busy buttoning the shirt, another is busy just

putting a few deft touches on it with a hand iron, finally it is folded and banded and carried to the sorting room where the collars and other things are being sorted. In the meantime many other things are being finished by the quick and skilful hand ironers, many pairs of hosiery have been dried and finished on the heated forms for that purpose.

The bundles are now checked off according to their list and wrapped and dispatched to the shipping room.

There are many other interesting items which one cannot in the brief space alloted go into.

The Personal Side

Suffice it to say that a laundryman has a busy and interesting life, and needs at times to be a real diplomat in the carrying out of his business with satisfaction to his customer and to himself. How often has he to remind his customer that goods wear out and to gently suggest that the word **worn** is the correct one instead of the word **torn** which is so frequently employed.

Has it ever occurred to you, gentlemen, that linen entrusted to the laundry has almost an everlasting life, for we have observed that nothing old or worn out is ever lost or damaged at the laundry. It is a matter of common knowledge, (among laundries, at least), that everything that has been lost in the laundry is "brand new" or has been washed but once before!

We get a wonderful insight into the vagaries of human nature in our business, and some strange cases of absent mindedness are evidenced in the peculiar things sent in with the laundry. One day a cat jumped out of a bundle, nearly startling the girl who opened it out of her wits. We could make out a wonderful list of things which you would scarcely credit. I recall an incident that happened not long ago in our own plant.

A wedding ring quite new reposing in its case was found in a call bundle. On these we only have the name, but no address. The daily paper was searched to see if any one bearing that name was announced in forthcoming weddings and we were rewarded by seeing that a professor from an eastern city was here to be married the next day to Miss ..... The name of the professor corresponded with the name on the laundry list. We pictured him, poor fellow, searching for his ring. Our Superintendent got in touch by telephoning with the bride-to-be's parents and through them with the professor himself, who, while thanking us most profusely for our noble effort, calmly told us that he han not missed the ring. We rather think he would have done so in the church next day.

Although, with our friend the plumber, the laundryman has been made the target and butt of many a joke, a more kindly feeling towards us might be generated, if the civilized world was suddenly deprived for a while of its plumbers and steam laundries, with no one to stop the excess flow of water on the one hand and no one to make proper use of it on the other.

From a health standpoint, as well as comfort and convenience, the laundry industry commends itself. And, in conclusion, gentlemen, let me point out that we are each and all interdependent upon one another, the Community needs the doctor, the druggist, the butcher, the baker, the grocer, the tailor, the laundryman, and last, but not least, the undertaker.

Employment

The Society's list of men available for new employment is now being revised. It has been found desireable to have certain standardized information concerning each applicant, for which purpose a form has been prepared. One of these forms has been sent to each name on the present list, and one will be sent to any other member or non-member with cost accounting experience, on request to the Society's office, 81 Victoria St., Toronto. Only those who return a form will be kept on the list in future.

Under present conditions, requests for experienced men have been scarce, but a few men have been placed in recent months in junior positions. We anticipate that the Society will be of considerable help in this direction as business improves, and our list is being brought up to date with this in view.

Opportunities for Canadian Industries

By W. T. BRICKENDEN, B.A.Sc., M.E.
Thorne, Mulholland, Howson & McPherson, Toronto

(From "Manufacturing and Industrial Engineering")

DURING the past year, many foreign organizations have established plants in Canada with facilities for the manufacture of their products for the Canadian and Empire markets. While it is true that the building and equipping of such new plants provide temporary work for many industries, there are many instances where these plants duplicate facilities already available in this country and which might be advantageously utilized to manufacture these products. The latter arrangement would not only contribute to the success of the enterprise concerned but also to the general economic welfare of the country as a whole by preventing the expansion of a productive capacity beyond the apparent demands of the market.

At the present time many industries in Canada are faced with decreased sales and increased overhead as well as idle plant and equipment. Even in prosperous times cases can be cited of equipment having capacity beyond the needs of the industry. This excess capacity might well be used for the production of other items and Canadian manufacturers so situated should consider the introduction of new lines.

The increased tariff presents an opportunity to arrange for the manufacture of foreign goods not made here for the Canadian market and the current slack period enables preparations to be made with little interference with regular production. This period will no doubt, allow sufficient time for the careful working out of all details in producing the new article as well as in marketing methods.

Before the introduction of a new product, however, a careful

investigation should be made to ensure the adaptability of the article to the manufacturer's production and sales facilities as well as the market possibilities. The failure to make a success of a new product can usually be traced to the lack of a comprehensive preliminary investigation. In one instance, a company selling equipment to manufacturers started the production of an article used by householders. An attempt was made to use their sales force to market the new product with disappointing results. Their manufacturing facilities were satisfactory but an entirely different type of sales organization was necessary to obtain sales in adequate volume. The loss incidental to the introduction of this product would have been avoided by a preliminary analysis of the situation.

It is not the intention of the resume following, to include all the many elements that may be considered in the arranging for the manufacturing of a new product. Individual cases may require further development and, in others, the investigation may be limited to but a few.

The Product

Consideration should first be given to the article itself. It should have some real merit either in appearance utility or novelty. If already on the market, the opinions of users of the article should be obtained. It should be compared with competitive articles to be sure that its sale will not be adversely affected due to obsolescence. If the article is made in a number of styles or sizes, the question of standardization or limitation of varieties should be studied, particularly if the sales possibilities are limited.

Price is another important factor. Competition may or may not determine its selling price in this country, depending a great deal, of course, on the merits of the artcle. The cost also affects the investment necessary in inventory so that this element should not be overlooked.

Market and Distribution

A market analysis should be made to determine the sales possibilities of the merchandise in this country. This should be sufficiently extensive to result in effective planning of production and sales.

When a new article is introduced into a country, it is sometimes necessary to modify it to suit the needs or tastes of the consumer. A notable example of this is in the case of cigarettes. Foreign types of cigarettes manufactured in Canada are modified to suit the Canadian taste. Cigarettes made to the original formula would not sell in this country. The suitability of the article should be tested from this viewpoint.

The question of seasonal sale of the product should be fully investigated. It is desirable to obtain an article that will be sold during the present off peak periods so that the sales force can be used to advantage and extensions avoided.

The question of distribution merits careful attention. Can the article under consideration be marketed with the established sales facilities? If it can be adapted to present methods—what changes are necessary and what will be the extra yearly cost for salesmen, dealers, warehouses, etc.?

Manufacture

Usually the actual production of a new article receives more careful consideration than the sale, as details must be obtained before the article can be made.

In considering the manufacture of a new product a study should first be made of the methods and equipment used to produce the article and the possibility of adapting available equipment to this purpose. Where new machinery is required accurate detailed costs should be obtained. Other local plants should be searched to determine whether special equipment is already available for the purpose of farming out the particular operation to advantage.

The sources of supply of raw material should be located and prices obtained. In cases where special materials are used and which are not manufactured in Canada, the question of using a Canadian substitute should be investigated. For instance, a welded steel structure might be used instead of a special cast steel frame.

In those cases where the new article is closely related to the present products, it may be possible to utilize some of the standard parts now produced. For example, in an agricultural machine, the type of wheel now produced in the plant may be used on the new machine—even if the design is different. A minor variation in dimensions can be easily taken care of and as long as the capacity is sufficient—costs can be reduced by its substitution.

The production of every part entering the proposed product should be analyzed to determine whether it is more economical to manufacture here or import the part from a foreign source of supply. This particularly applies where expensive patterns or dies are required and where the production quantity is insufficient to warrant the capital expenditure. Where importation is warranted, arrangements should be made with the Department of Customs for the assignment of a valuation of the part for duty purposes.

As one of the purposes of introducing a new product is for the greater use of facilities, the seasonal production of the article should be analyzed to determine whether its production will fit in with production schedules of the standard products without overlapping or interference, but ensuring the fullest utilization of facilities possible.

Actual costs of production obtained in the foreign plant should be procured and an estimated production cost made up based on actual raw material prices, equipment to be used and quantity to be produced. Without information concerning probable sales volume such an estimate could not be satisfactorily made.

License Agreements

While our friends of the legal fraternity may be called on to provide the proper phraseology, there are a number of matters that should be considered and covered in the formal agreement for the sale and manufacture of the article under consideration.

The agreement should definitely set out the territory for exclusive sales rights, the length of time the license is to be active and the basis on which cancellation may be arranged.

The method of payment or royalities should be clearly set out. The question of remuneration to licensor's agents for sales made for delivery in licensee's territory should be laid down. The setting of minimum yearly quotas should be avoided. Other means if required should be used to protect the licensor against inaction on the part of the licensee.

The agreement should include details of the extent of engineering or technical assistance to be rendered by the licensor. Drawings, new developments, research, etc., should be covered in detail. The use of patterns, the purchase of parts and service should be arranged for.

Arrangements for obtaining advertising literature, payment

therefore, etc., should be set out. It is usual for the licensor to continue to pay for any advertising at present employed and to pay a portion or all of any new advertising decided upon.

The agreement should include an undertaking by the licensor to protect any patent rights, or trade marks in the territory covered. New or future patents or trade marks concerning the article should be included under this heading and the question of royalities on improvements settled.

Experience has indicated that it is desirable to draw up a preliminary license which is to be superseded by a formal agreement within a reasonable time rather than attempt to recover all questions immediately. It has been found that after a few months' contact that many matters will develop which were not foreseen.

Research vs. License

Many manufacturers believe it is necessary to develop their own products—sometimes by stealing ideas—and circumventing patents. This is not the most economical procedure. If an article has been successfully produced elsewhere, it is more advantageous to obtain the experience and engineering service of the company which has overcome the experimental and development stage. The royalties paid will, in most instances, be small in comparison to the costs of development and the time required to get into the market would be greatly shortened.

There is also the advantage of being able to capitalize on the past advertising efforts of the licensor. A nationally known article has a lower sales resistance.

Research admittedly is a very essential matter in any industry but where it has not been applied to the problem in hand, it is more advantageous and economical to utilize the other fellow's experience.

Summary

If the analysis had been carried out in detail, it will be possible to make up a profit and loss budget for the new product covering the period of the license. The effect of introducing the new product on present costs of manufacturing and marketing can be foretold. There is an essential difference between guesswork and an intelligent forecasting of results. The latter requires a systematic assembly of known facts on which sound judgment can be based.

In considering the utilization of excess facilities, care should be taken to avoid a line of products that are fundamentally different in marketing or manufacturing procedure. For most Canadian industries, there are allied products of foreign manufacture which would fit in well with existing facilities and sales organization. The arrangement for their manufacture on partially employed equipment would prove profitable to the company and would be an aid to the economic stabilization of industry in Canada. New plants and equipment are not justified where adequate facilities already exist.

Captain.—"Got the location?"

Mate (pointing at map).—"If them's the Canary Islands—fine! But if they's fly specks—heaven help us!"

* * * * *

Judge. "Guilty or not guilty?"

Prisoner: "Not guilty, sir."

Judge: "Ever been arrested before?"

Prisoner: "No, sir, I never stole before."

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Four Week Periods for Railway Records

A proposal for records by periods of four weeks, outlined by the International Fixed Calendar League, is being considered by railways on this continent. The plan, as set forth by Moses B. Cotsworth, General Director of the League, is as follows:

"The proposal is, to unitedly extend over all American railroads their present 3-week system of compiling earnings to the 7th, 14th and 21st of months during January, 1933 to the 4th week ending January 28th, and thereafter slice off the rest of the year into 4-week periods—while concurrently compiling your usual monthly statistics in 1933 for executive and Interstate Commerce use.

"During that year it would publish only monthly statistics compared with those for 1932. But the 4-week periods thus sliced off as subtotals in 1933, would form the basis for comparison with the 4-week periods used during 1934 and future years.

"Please note that from 1934 these periods would always remain constantly true for comparisons, without adjustment—*whether the Cal is simplified or not*, and that then carloadings, earnings and expenditures would all accord for every part of railroad purproses.

"Collective consideration by your practical officials and by the American Railway Association, can enable you to estimate the value of the benefits your Company can derive through the use of fixd 4-week periods, which would in Leap years include Leap-day as the 29th day in the 3rd Period ending March 25th.

"That complete series of fixed periods would make your statistics and charts truly comparable, while also providing the needed equalizing chart so precisely scaled that it will enable your company to see by a glance over the curves plotted thereon for any two or more years, the real effects of seasonal variations.—12 month calendars fail in that.

"For each series of 12 present monthly pay checks, 13 would be required, and for each series of 24 semi-monthly checks 26 would have to be written out, but this relatively small cost would be more than

counteracted by the benefits which 4-week periods will confer through better supervision, reduction of costs, budgeting and regulating expenditures.

"On the other hand your employees would be benefited and more contented by receiving payment every 2 weeks, at .923 of their present monthly or semi-monthly rates, (as provided for without further calculation, on page 3 of enclosure L-6)—instead of having to pay for a 3rd Saturday's groceries, meats, movies, tobacco, etc. out of their half-months pay,—as in January, April, July, October and December this year.

"Experience and inquiries in many countries prove that employees will not demand the month-rate for 4-weeks work, as their rents, etc. would otherwise be increased. That will be inexorably prevented by the Calendar Ratification Law, which before 1939 will prescribe that the equivalent Rents by Table "D", shall be paid to the nearest 5 or 10 cents, as Congress may decide.—*But that adjustment will not arise until after the International Conference in 1935 decides how the Calendar shall be simplified.* That is remote, and distinct from the present proposal to use Fixed 4-week periods from January 1st 1933.

Table "D" for Converting Monthly to 4-Week Payments

"The enclosed table is designed to adjust present monthly and semi-monthly rates of payment to those required for 4-week and 2-week periods.

"Its last column fairly provides the easiest means to adjust present monthly mileage limits in labor union contracts and rules, which for typical limits it would adjust as below:

Present Monthly Salary Rates		Miles Arithmetically Adjusted To 4-Weeks		Arithmetically Adjusted To Nearest 100 Miles
NOW	NEW	MILES	MILES	MILES
$100	$92.31	2,600	2,400	2,400
150	138.46	3,000	2,662	2,900
200	184.62	3,200	2,954	3,000
250	221.54	3,800	2,508	3,500
300	276.92	4,000	3,692	3,800
400	369.23	4,800	3,431	3,400

*

*The cents in the Table can be adjusted by sight to the nearest $1, 50 or 25 cents, or paid with the last month's or ½ month's salary or wages.

"By the same Table, guaranteed DAYS PER MONTH rules can be adjusted thus:

RULE CONTRACT DAYS	DAYS	DAYS to nearest day
26	24	24
31	28.6	29
35	32.3	32

"These show how easily such adjustments can be mutually made between the Companies and the Railway Brotherhoods, whose compensation advantage would be given in the regularity of pay days on the same day of the week, for every 2-weeks ending on fixed dates throughout each year.

"The first thought of inadequately informed people, that the cost of accounting would be increased by about 8.3 percent, is disproved

by the experience of hundreds of companies who use 4-week periods. The total number of items remain the same whether 12 or 13 periods are used.

"The fact that 13 periods yearly require a 13th closing of accounts and their summary is discounted by each of the 13-periods requiring slightly less work than each of the longer 12 months need; and the further fact that by using 4-week periods the office work is made easier and regular, as the correspondence and corrections for discrepancies and adjustments are less, as proved by "What present users say," recorded on page 3 of the enclosed folder on "How the 13-Period Calendar Works in Business."

"At first passenger audit tests by 4-week periods seem more exacting, but as you audit February's 4 weeks without assistance, you will more easily audit the other more regular 12 periods; as proved by the experience of railroad and other companies who have already changed.

"The fuller benefits that a simple calendar will confer upon all, are outlined on page 4 of our Leaflet L-6. Its Table "C" on page 1 shows how the contract and dividend dates after the year 1938 may be easily adjusted; For example, a dividend now payable on April 1st would be payable on April 7th. As April 1st now ends the year's 13th week, and July 1st ends its 26th week, the simple deduction of the April 1st earnings, etc. will provide exact comparison with the 1st quarter of former years, and the deduction of July 1st will truly adjust for comparison with the 1st half of former years. As the 39th week ends on the present September 30th and the 52nd week on December 31st, such adjustments are not required for them.

"The evidences I have gathered during consultations with Government and public authorities in more than 50 nations, indicates that the final International Conference to be held about April, 1935, will result in the almost universal public adoption of the perpetual Fixed Calendar of 4-week months about January 1, 1939."

A health officer received the following notice from a resident of his district.

"Dear Sir—I beg to tell you that my child, aged ten months, is suffering from measles as required by State Law."

* * * * *

First Co-ed.—"What would you do if a swell-looking salesman waited on you while you were buying underwear?"

Second Ditto.—"I think I'd have a fit."

* * * * *

"I know a place where women don't wear anything—except a string of beads once in a while."

"Holy gee, where?"

"Around their necks, stupid."

* * * * *

Automobile Salesman.—"This controls the emergency brake. It is put to use very quickly in case of ememgency."

Sweet Young Thing.—"I see; something like a kimono."

* * * * *

"Say, mon, when is Annie MsTavish goin' to let you marry her "

"It's verra uncertain, mon. Some fool gave her a big box of letter paper with her name printed on it. She won't get married 'till it is used up, an' she writes very few letters acount of the postage."